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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/247,217	02/10/95	TOMASULA	P 862.004051

IM52/0130

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EXAMINER

DUBOIS, P

ART UNIT

1761

PAPER NUMBER

DATE MAILED: *12* 01/30/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)
	09/247,219	TOMASULA, PEGGY M.
	Examiner DuBois	Art Unit 1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 02 January 2001.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 2,4-6,8, 9, 11-13, 15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 2, 4-6, 8, 9, 11-13, 15 and 16 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) Notice of References Cited (PTO-892)
- 16) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) Interview Summary (PTO-413) Paper No(s). _____
- 19) Notice of Informal Patent Application (PTO-152)
- 20) Other: _____

DETAILED ACTION

Continued Prosecution Application

The request filed on January 2, 2001 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/247,219 is acceptable and a CPA has been established. An action on the CPA follows.

The cancellation of claims 1, 3, 7, 10 and 14 are acknowledged. The rejection of the previous Office Action is maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4-6, 8-9, 11-13 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlstrom (U.S. Patent 5,006,349) in view of Tomasula (U.S. Patent 5,006,349).

Dahlstrom et al (Dahlstrom) teaches a protein product and a process for continuously reacting protein solution by direct acidification to produce food products (U.S. Patent 5,006,349, col. 2, lines 30-35). Dahlstrom teaches that an ingredient stream and a protein stream can be combined under high pressure (col. 4, lines 10-20). The protein stream may be derived from a number of products including soy milk and

cereal protein slurries (col. 3, lines 30-35). In example 11, Dahlstrom teaches a milk-soy protein cheese product. Dahlstrom teaches that a coagulum of the protein stream and other ingredients can be made. The mixture is heated 150oF. After the mixture is prepared, a sonolator is used at 800 psi. As the process continues, the pressure is reduced to 400 psi (col. 8, lines 40-60). The pH of the mixture was 5.2. However, Dahlstrom teaches that the pH can be optimized to vary the consistency of the product. Thus, it would have been obvious to one of ordinary skill in the art to optimize the pH and the concentration level of protein in the coagulum because the pH level and protein level affect the desired consistency of the product.

Although Dahlstrom teaches a vegetable protein concentrate product in the form of a soy milk cheese product, Dahlstrom is silent as to the use of a carbon dioxide to precipitate protein. However, Tomasula teaches a process for the continuos production and removal of products from a high-pressure system. In the process, Tomasula broadly teaches that carbon dioxide under pressure can precipitate proteins (U.S. Patent 5,432,265, col. 1, lines 53-57). Furthermore, Tomasula teaches that by injecting carbon dioxide and increasing the pressure, carbonic acid is formed which lowers the pH. Tomasula teaches that this is desirable as the lower pH precipitates the protein. Tomasula further teaches that in order to allow the solid products to exit the system while at the same time maintaining high pressure in the reactor, a high-pressure pump is operated in reverse to gradually reduce the pressure at the exit line to atmospheric pressure (col. 3, lines 10-15). In addition, Tomasula teaches that the section of the

extruder can also include an optional holding tube to increase residence time (col. 3, lines 60-65).

Thus, it would have been obvious to one of ordinary skill in the art to provide Dahlstrom with carbon dioxide because the carbon dioxide under pressure can lead to the precipitation and concentration of protein.

Response to Arguments

Applicant's arguments filed on January 2, 2001 have been fully considered but they are not persuasive.

The applicant argues that Dahlstrom does not teach the addition of carbon dioxide. However, the rejection is based on Dahlstrom in view of Tomasula. Dahlstrom teaches that carbonic acid can be added into a process for producing protein products. As Tomasula teaches that carbon dioxide can easily be converted into carbonic acid, it would have been obvious to one of ordinary skill in the art to incorporate carbon dioxide or carbonic acid into the process.

The applicant further argues that the carbon dioxide provides the important function of actually maintaining the desired pressure in the instant invention. However, the actual source of the pressure is not disclosed in the claimed invention. The claimed invention only recites that the carbon dioxide is administered in to the system under pressure. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., maintaining the pressure of the system) are not recited in the rejected claim(s).

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The applicant further argues that Dahlstrom fails to teach a holding step and the gradual depressurization of the product stream. However, as noted above, Tomasula teaches these limitations. Furthermore, one of ordinary skill in the art would be motivated to combine Tomasula and Dahlstrom. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Tomasula and Dahlstrom are both concerned with obtaining protein concentrates.

As the rejection of Dahlstrom in view Tomasula teach each process step, the rejection of claims 2, 4-6, 8-9, 11-13, 15-16. See also *In re Burhans*, 154 F.2d 690, 69 USPQ 330 (CCPA 1946) (selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results); *In re Gibson*, 39 F.2d 975, 5 USPQ 230 (CCPA 1930) (Selection of any order of mixing ingredients is prima facie obvious.).

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Conclusion

1. No claim is allowed.
2. Any inquiring concerning this communication or earlier communications from the examiner should be directed to Philip DuBois whose telephone number is (703) 305-0508. The examiner can normally be reached on Monday through Friday from 8:00 to 5:30. The examiner is not in the office the second and fourth Fridays of each month.
3. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gabrielle Brouillette, can be reached at (703)-308-0756. The fax number for the group is (703)-305-3602.
4. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-0661.

Philip DuBois

11/19/00

Milton Cano
MILTON CANO
PRIMARY EXAMINER

Art 1761